U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472

MAR 2 1 2013

FEMA

Mr. Joe Flynn
Director
Vermont Emergency Management
103 South Main Street
Waterbury, Vermont 05671-2101

Re: Second Appeal – Town of Townshend, PA ID 023-733000-00, Dam Road Culvert Replacement, FEMA 4022-DR-VT, Project Worksheet (PW) 1803

Dear Mr. Flynn:

This is in response to your December 18, 2012, letter, which transmitted the referenced second appeal on behalf of the Town of Townshend (Applicant). The Applicant is appealing the U.S. Department of Homeland Security's Federal Emergency Management Agency's (FEMA) denial of $99,358 for the Dam Road culvert upgrade.

Background

In August 2011, floodwaters resulting from Tropical Storm Irene washed out and destroyed an elliptical corrugated metal pipe (CMP) culvert located at Dam Road in the Town of Townshend. The CMP was 120 feet long, 16 feet high, and 12 feet wide with a cross sectional area of 140 square feet. The Applicant replaced the CMP with a 28 foot wide, 7 foot high open bottomed, pre-cast concrete arched box culvert with a cross sectional area of 196 square feet for a total cost of $543,589. The Applicant asserted the upgrade was required by the Stream Alteration General Permit (Permit) issued by the Vermont Agency of Natural Resources.

FEMA determined that the permitting process was discretionary; did not apply uniformly across the State; and did not meet FEMA's requirements for codes and standards at 44 CFR §206.226(d), *Standards*. Therefore, FEMA designated the culvert upgrade an improved project and prepared PW 1803 for $440,230 to fund an in-kind replacement of the original culvert with a 100 foot long and 14 foot diameter CMP. FEMA also approved funding for a mitigation concept adding wingwalls to both the inlet and outlet of the CMP.

First Appeal

The Applicant submitted its first appeal via email on May 23, 2012, which was forwarded by Vermont Emergency Management (VEM) on July 19, 2012. In support of the first appeal, VEM argued that the culvert upgrade was required by the Permit. VEM also submitted information and a memorandum from Vermont's Agency of Transportation (VTrans), which asserted that

virtually all environmental regulations involve professional judgment in their application and the permitting process uniformly requires stream equilibrium and aquatic organism passage for all projects.

On October 15, 2012, FEMA's Regional Administrator determined that the Permit does not meet the criteria as a state or local code or standard under 44 CFR §206.226(d) *Standards* and denied the first appeal. Specifically, the Regional Administrator stated that the Permit does not establish any specific engineering design standards or measurable performance criteria that would be required to be followed in order to obtain approval for a replacement culvert nor does it require any specific method of construction for a replacement culvert or require specific upgrades from a CMP to an open bottomed arched box culvert. In addition, the Regional Administrator determined that the permitting process allows discretion to the Agency of Natural Resources to implement different standards for culvert replacements, and therefore does not meet FEMA's regulatory requirement for uniform application of codes and standards.

Second Appeal

The Applicant submitted its second appeal by a letter dated December 3, 2012, which was transmitted to FEMA by VEM on December 18, 2012. In support of its appeal, the Applicant submitted an additional memorandum from VTrans. VEM and VTrans argue several points including:

- The State's stream alteration statute is nondiscretionary and the Permit is merely the means of implementing the statutory standards.
- The Permit is not discretionary because it requires all covered work to attain and maintain stream equilibrium and to allow aquatic organism passage.
- FEMA established eligibility requirements with no basis in law. For example, FEMA's position regarding the application of discretion in the permitting process is not supported by the Stafford Act or FEMA's regulations.
- FEMA is applying hydraulic standards to the exclusion of stream alteration standards.
- The culvert upgrade is the least cost means of complying with the United States Army Corps of Engineers' permit requirements.
- The CMP approved by FEMA would not comport with FEMA's own floodplain and environmental regulations.

Discussion

Section 406(e) of the Stafford Act authorizes FEMA to fund the costs of repair and replacement of a facility based on the design of the facility as it existed immediately before the disaster and in conformity with current applicable codes, specification, and standards. FEMA's regulation at 44 CFR §206.221(i) defines standards as "codes, specification, or standards required for the construction of facilities."

Codes and standards must meet the five criteria established at 44 CFR §206.226(d), *Standards* for associated upgrades to be eligible for assistance.

1. The code or standard must apply to the repair work or restoration required.
2. The code or standard must be appropriate to the pre-disaster use of the facility.
3. The code or standard must be reasonable, in writing, and formally adopted, and implemented prior to the disaster declaration date or be a legal Federal requirement.
4. The code or standard must apply uniformly to all facilities of the type being repaired within the applicant's jurisdiction.
5. The code or standard must have been enforced during the time that it was in effect.

The Applicant asserts that its State stream alteration statute and Permit, which require all covered work to attain and maintain stream equilibrium and allow aquatic organism passage are not discretionary and meet FEMA's criteria for codes and standards. However, as explained by the Regional Administrator, the statute and Permit do not establish any specific engineering design standards or measurable performance criteria that are required to be followed for a replacement culvert. Specifically this renders it impossible for FEMA to determine whether permitting officials are imposing reasonable requirements, are imposing such requirements in a uniform manner, and whether the requirements were enforced prior to the disaster. Neither the statute nor the Permit provides any criteria or standards that FEMA can evaluate these requirements against. If, for example, the statute and Permit required that box culverts be used for all new construction or in replacing CMP or other culvert types, FEMA could evaluate the construction standard against the five criteria. However, because the statute and Permit do not contain this type of requirement, they do not meet FEMA's regulatory requirements for an eligible standard.

Hazard Mitigation

Although the cost of the box culvert is not eligible as a code or standard upgrade, FEMA has reviewed the project and determined that the upgrade is an eligible 406 Hazard Mitigation project.

Section 406 of the Stafford Act authorizes FEMA to fund hazard mitigation measures that are applied during the repair or restoration of an eligible facility that will reduce the likelihood of future damage. FEMA's regulation 44 CFR §206.226(e) *Hazard mitigation,* states that in approving grant assistance for restoration of facilities, the Regional Administrator may require cost effective hazard mitigation measures not required by applicable standards and that the cost associated with such measures will be included as an eligible cost in the underlying restoration project.

Further, Recovery Policy (RP) 9526.1, *Hazard Mitigation Funding under Section 406 (Stafford Act)* dated March 30, 2010, provides additional guidance on the application and eligibility of hazard mitigation measures. Appendix A of the policy states that the replacement of a destroyed drainage structure with a larger structure is among the eligible hazard mitigation measures that are pre-determined to be cost effective when they do not exceed 100 percent of the project cost.

The box culvert in question here increased the surface area in comparison to the CMP. In addition, the open bottom configuration and pre-cast concrete footings will decrease scour and

the likelihood of the culvert being undermined or washed out in the future. The additional cost of constructing the box culvert is approximately 30 percent of the in-kind replacement cost; well below the 100 percent of project cost which would be deemed cost effective under the Appendix.

Per RP 9526.1, FEMA must approve proposed hazard mitigation projects prior to funding. This provides FEMA with the opportunity evaluate the proposed hazard mitigation projects for cost effectiveness, technical feasibility, and compliance with statutory, regulatory and executive order requirements. FEMA has determined that the project is cost effective, technically feasible, and has met all environmental review compliance requirements. Therefore, FEMA will waive the pre-approval requirement for this project.

Conclusion

I have determined that the box culvert upgrade is an eligible 406 hazard mitigation measure. As such, the costs associated with the upgrade are eligible under the Public Assistance Program. Accordingly, I am granting this appeal. By copy of this letter, I am requesting that the Regional Administrator to take appropriate action to implement this determination.

Please inform the Applicant of my decision. This determination constitutes the final decision on this matter pursuant to 44 CFR §206.206, **Appeals.**

Sincerely,

Deborah Ingram
Assistant Administrator
Recovery Directorate

cc: Paul F. Ford
Acting Regional Administrator
FEMA Region I